## Summary of Input from National Park Service and US Fish and Wildlife Service

Centerville Township Commercial Wind Ordinance Committee meetings 8/24/06, 11/21/06 and 11/27/06

Nationally, there have been many concerns regarding the effects of improper siting of wind turbines on increased avian and bat mortality. The location of a portion of the Sleeping Bear National Lakeshore within Centerville Township poses the need for additional consideration of these issues as well as others related to the degradation of the Park experience/environment for all of us citizens who share the ownership and use of this of this national resource.

Steve Yancho, the Director of Natural Resources at Sleeping Bear National Lakeshore, attended several of the committee research meetings to voice NPA concerns in regards to any potential wind farm development in Centerville Township and it's potential effects on the park. Mr. Yancho hand delivered a draft of a letter listing specific concerns of the park service; mortality, injury and habitat issues in regards to birds, insects and bats, and additionally, the effects on viewscapes, soundscapes, vibrations particularly in areas of the park managed as wilderness.

In order to study the impact of wind turbines on viewscape from the designated wilderness areas of the park, the National Park Service provided maps showing the visibility of 150' and 400" turbines located at potential wind sites, selected by committee members based on elevation, and parcel size, that were more than three miles from the National Park.

Mr. Yancho also supplied a copy of a letter from the US Fish and Wildlife Service, addressing concerns of another proposed Michigan wind project, with specific recommendations that apply to the location of Centerville Township and its natural resources. These are "Specifically, the Service recommends that no turbines be located within 3 miles of a Great Lakes's shoreline, within 5 miles of bald eagle nests or between the refuges and known feeding areas of migratory water birds and waterfowl. In addition, we strongly recommend that turbines be located as far away from any national wildlife refuge as possible." This was the basis for the three-mile setback recommendation from the National Park. The USFWS also has developed site selection guidelines addressing the studies and research necessary to avoid and minimize impacts to birds and wildlife. Interim Guidelines to Avoid and Minimize Wildlife impacts from Wind Turbines, Federal Register: July 10, 2003 (Volume 68, Number 132) is referenced in our Wind Ordinance.